Please substitute the attached clean copy of the amended claims 1, 6, and 10 for the pending claims 1, 6, and 10. A marked-up version of the claims with all the changes shown is attached also.

REMARKS

Claims 1 and 6 through 11 are in the application; claims 2, 3, 4, and 5 are canceled.

Reconsideration and withdrawal of the rejection of claims 1 and 5-11 under 35 U.S.C. 102(b) as being anticipated by Hohenbichler et al. (US 5,577,548) is respectfully requested.

Claim 1 has been amended by incorporating therein the subject matter of claims 2, 3, 4 and 5. Claim 10 has been amended to incorporate the features of claim 5. The rejection of claims 2 and 4 under 35 U.S.C. 103(a) as being unpatentable over Hohenbichler et al. (US 5,577,548) is no longer applicable since the features of these claims are now contained in amended claim 1. The rejection of claim 3 under 35 U.S.C. 103(a) as being unpatentable over Hohenbichler et al. (US 5,577,548) in view of

Morwald et al. (US 6,209,619) is no longer applicable since the features of the claim is now contained in amended claim 1.

According to a first decisive feature of the present invention as claimed in claim 1, the adjustments of the segments is carried out at **constant casting speed**. This has the great advantage that the section reduction or increase is carried out without the casting speed having to be reduced or increased for the purpose of change of section, and this means that the production output in comparison to known devices can be increased and constant production and casting conditions are provided. This is described on page 7, paragraph 2, of the instant specification. In contrast, the cited prior art reference Hohenbichler et al. describes in detail (see column 9, lines 14-56) how the casting speed is varied during the course of adjustment of the support segments 4, 5.

According to a another decisive feature of the amended claim 1, the segments are adjusted at a constant adjusting speed with dynamic position control, wherein a predetermined force threshold value is not surpassed (former claim 4). This is not mentioned in Hohenbichler et al. The examiner argues that the adjusting

speed must be constant since the exit side and the inlet side of neighboring segments are connected. This is true for one particular jointed connection but not for the entire chain of segments. Each jointed connection can be advanced independently and therefore the adjusting speed can be different at each joint connection.

Moreover, the adjusting speed of the segments for advancing or moving away the segments is calculated based on the permissible billet elongation limit, the current casting speed, the current section adjustment, and the resulting volume flow of the billet (former claim 5). This is also not mentioned in or suggested by Hohenbichler et al.

Even though the cited prior art discloses the adjustment of the support segments 4, 5 relative to one another by means of a control as a function of the measured gap between the opposed rollers 8 and, if desired, depending on the casting speed (see col. 6, lines 55-65), the cited prior art reference is silent in regard to the **adjusting speed being constant or being calculated** based on: permissible billet elongation limit, the current casting speed, the current section adjustment, and the resulting

volume flow of the billet. This is mentioned nowhere in the prior art reference and therefore not anticipated. The described adjustments according to the prior art deal with the **casting speed** (speed of the billet) but not with the adjusting speed of the segments (the speed for moving the segments toward and away from the billet); in fact, the adjusting speed of the segments is never mentioned at all. Therefore claims 1 and 10 are not anticipated or made obvious by Hohenbichler et al.

In regard to claim 6, it is respectfully submitted that the claim features an equation for calculating the required adjusting speed V:

$$V = Ds/Ls * Vcast$$

wherein Ds is the section change, Ls is the segment length, and Vcast is the current casting speed. No such equation is disclosed in the cited prior art and no such equation is obvious in view of the cited art since there is no mention at all of calculating the adjusting speed.

In regard to claim 7 it is respectfully submitted that the adjusting steps are carried out by hydraulic adjusting devices. This is described also in the cited prior art reference. However,

the prior art reference only describes a position control of the advancement of the supports 4, 5 by means of the cylinders 12 of the displacement devices 9 based on the measuring device 13 which measures the size of the gap. According to the present invention, when a predetermined force pressure is surpassed, force control is applied instead of position control and when the target position has been reached, the position control is applied again. These particulars steps are nowhere mentioned in the cited prior art reference.

Claim 1 as amended together with its dependent claims and claim 10 with its dependent claim are therefore believed to be allowable.

Therefore, in view of the foregoing, it is submitted that this application is now in condition for allowance and such allowance is respectfully solicited.

Any additional fees or charges required at this time in connection with the application may be charged to Patent and Trademark Office Deposit Account No. 11-1835.

Marked-up Claim Version of Claims 1, 6, 10 to Show Changes Made

1. (Amended) A method for changing the section of a billet of a continuous casting plant during continuous casting, wherein opposed sides of the billet are in contact with oppositely positioned roll supports arranged below a continuous casting die, wherein the roll supports are comprised of segments having rolls, wherein adjoining ones of the segments of each roll support are connected to one another by a jointed connection and wherein each segment is configured to be adjustable independent of the other segments with respect to an angular position relative to the billet, and wherein in an initial position of the segments of the roll supports are adjusted to a uniform billet section; the method comprising the step of:

advancing sequentially in a direction of continuous casting the segments toward the billet by moving the jointed connections toward the billet in a controlled sequence of adjusting steps for reducing the section of the billet; or

moving sequentially in a direction of continuous casting the segments away from the billet by moving the jointed connections away from the billet in a controlled sequence of adjusting steps for increasing the section of the billet;

for reducing the section of the billet with a constant casting speed and with the solidification point of the billet having passed the first and second segments, advancing an exit side of the first segment and an inlet side of the second segment in the casting direction in a first one of the adjusting steps toward the billet by moving the first and second segments at the jointed connection connecting the first and second segments toward the billet by set-point control, and after the first and second segments have reached a target position, advancing an exit side of the second segment and an inlet side of the third segment in the casting direction in a second one of the adjusting steps toward the billet by moving the second and third segments at the jointed connection connecting the second and third segments toward the billet, and after the second and third segments have reached a target position, advancing in further ones of the adjusting steps the third and further segments toward the billet sequentially in the same manner until all segments have reached the target position;

for increasing the section of the billet with a constant casting speed and with the solidification point of the billet having passed the first and second segments, moving the exit side of the first segment and the inlet side of the second

segment in the casting direction away from the billet in a first one of the adjusting steps by moving the first and second segments at the jointed connection connecting the first and second segments away from the billet by set-point control, and, after the first and second segments have reached a target position, moving the exit side of the second segment and the inlet side of the third segment in the casting direction away from the billet in a second one of the adjusting steps by moving the second and third segments at the jointed connection connecting the second and third segments away from the billet, and, after the second and third segments have reached a target position, moving in further ones of the adjusting steps the third and further segments and so forth away from the billet sequentially in the same manner until all segments have reached the target position;

adjusting the segments at a constant adjusting speed with dynamic position control, wherein a predetermined force threshold value is not surpassed;

calculating an adjusting speed of the segments for advancing or moving away the segments based on permissible billet elongation limit, the current casting speed, the current section adjustment, and the resulting volume flow of the billet.

6. (Amended) The method according to claim 1 ~~5~~, wherein the adjusting speed is calculated, based on the current casting speed, the segment length, and the required adjusting stroke of the segments, by the equation

$$V = Ds/Ls * Vcast$$

wherein Ds is the section change, Ls is the segment length, and Vcast is the current casting speed.

10. (Amended) A device for performing the method according to claim 1, the device comprising:

a first roll support and a second roll support positioned opposite one another and configured to receive a billet therebetween;

the first and second roll supports comprised of segments having rolls, wherein adjoining ones of the segments of each roll support are connected to one another by a jointed connection and wherein each one of the segments is configured to be adjustable independent of the other segments with respect to an angular position relative to the billet;

an adjusting device configured to move the segments of the first and second roll supports, wherein the adjusting devices comprises means for position control ~~or~~ and force control and

means for calculating an adjusting speed of the segments for advancing or moving away the segments based on permissible billet elongation limit, the current casting speed, the current section adjustment, and the resulting volume flow of the billet.